# 第２講　英語長文演習②

次の英文を読んで，問に答えなさい。

The debate over how technology influences jobs is as old as the industrial era itself. In the second decade of the nineteenth century, a group of English textile workers protested the introduction of *spinning frames and *power looms, machines of the early Industrial Revolution that threatened to leave them without jobs. Since then, each new burst of technological progress has brought another wave of concern about a possible mass（　1　）of human labor.

On one side of the debate are those who believe that new technologies are（　2　）to replace workers. In 1930, after the spread of electricity and the motor car engine, one economist predicted that (3) <u>such innovations would lead to an increase in material prosperity but also to widespread unemployment</u>. At the beginning of the computer era, in 1964, a group of scientists and social theorists warned that automation results in improving the productive capacity, requiring progressively less human labor. On the other side are those who say that workers will be just fine. They point out that real wages and the number of jobs, have increased relatively steadily throughout the industrialized world even as technology has advanced like never before.

*NOTE*

In 1983, the Nobel Prize-winning economist Wassily Leontief highlighted the debate through a clever comparison of humans and horses. For many decades, horse labor appeared unaffected by technological change. Even as railroads replaced the stagecoach and the *Conestoga wagon, the U.S. horse population grew seemingly without end. The animals were（　4　）not only on farms but also in the country’s rapidly growing urban centers. But then, with the introduction and spread of the powerful and efficient engine, the trend was rapidly reversed. As engines found their way into automobiles in the city and tractors in the countryside, horses became largely（　5　）. Then, the question is whether a similar outcome is possible for human labor. Are autonomous machines and supercomputers indicating a coming wave of technological progress that will finally sweep humans out of the economy? For Leontief, the answer was yes. However, he missed a number of important points. Humans, fortunately, are not horses and remain an important part of the economy.

*NOTE*

Alfred Marshall, a British economist, in his foundational 1890 book, *Principles of Economics,* said, "Human wants and desires are countless in number and very various in kind." Ever since Marshall, people have linked unlimited wants to full employment. After all, who else (　6　) workers will be able to fulfill all those wants and desires? We humans are a deeply social species, and the desire for human connections carries over to our economic lives. We come together to appreciate human expression ability when we attend plays and sporting events. Regular customers often visit particular restaurant not only because of the food and drink, but because of the hospitality offered. (7) In these cases, human interaction is central to the economic transaction, not incidental to it. Humans have economic wants that can be satisfied only by other humans, and that makes us deny that we will go the way of the horse.

*spinning frames：紡績機　　**power looms：動力織機

***Conestoga wagon：大型幌馬車

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A. 本文中の空所（1, 2, 4, 5, 6）に入れるのに最も適当なものを, それぞれ下記（a ～ d）の中から一つ選びなさい。

| | | | |
|---|---|---|---|
| （1）a. production | b. invitation | c. assessment | d. displacement |
| （2）a. likely | b. anxious | c. reluctant | d. stunned |
| （4）a. external | b. reflective | c. ethical | d. vital |
| （5）a. adaptive | b. irrelevant | c. familiar | d. destructive |
| （6）a. of | b. in | c. but | d. for |

B. 下線部（3），（7）を，それぞれ such innovations と these cases を具体的に説明して，日本語に訳しなさい。

C. 次の英文（a ～ f）の中から本文の内容と一致するものを二つ選びなさい。

a. Textile workers in the industrial era were quite satisfied with the new machines, although they complained of the burden imposed on their daily work.

b. There are more people who found the negative effects of new technologies on human labor than those who did not.

c. Those who are not worried about technological advancement think that workers will not suffer from innovations.

d. The number of horses seen in the city and countryside had been decreasing even before the introduction of the automobile.

e. Leontief thought that humans would not be replaced by the wave of technological advancement.

f. Human labor is essential for the economy because people depend on interaction with each other in their economic lives.

*NOTE*

# 第２講　解答

＜解答＞

A.（1）d　（2）a　（4）d　（5）b　（6）c

B.（3）電気や自動車のエンジンが広まったおかげで，物質的な豊かさは増すだろうが，失業も広がるだろう。

（7）なじみの客が特定のレストランを訪ねる理由が，そこで提供されるおもてなしであるような場合，人間同士の交流は，経済取引に対して付随的なものではなくて，その中心となる。

C. c, f

＜全訳＞

科学技術がどのように仕事に影響を与えているかに関する議論は，工業時代そのものと同じくらい古いものだ。1810 年代に，イギリスの織物工の集団が，紡績機や動力織機の導入に抗議をした，それらは彼らの仕事を奪う恐れがある産業革命初期の機械だった。その時からずっと，技術革新の新しい突然の出現があるごとに，人間の労働が大量に取って代わられる可能性に関する心配というもう一つの波を引き起こしてきた。

その議論の一方には，新しい技術が労働者に取って代わる可能性があると信じる人がいる。1930 年には，電気や自動車エンジンが広まったのを受けて，一人の経済学者が，そのような革新によって，物質的豊かさが増すだろうが，失業も広がるだろうと予言した。コンピューター時代の幕開けである 1964 年に，科学者や社会理論家の集団が，自動化が原因で，生産能力が上がり，次第に人間の労働が不要となるだろうと警告した。他方には，労働者は問題ないと言う人々がいる。その人たちが指摘するには，科学技術がかつてないほど進歩している時でさえ，実際の賃金や仕事の数は，産業界を通じて，比較的着実に増えているということだ。

1983 年に，ノーベル賞を受賞した経済学者のワシリー・レオンチェフは，人間と馬を巧みに比較して，その議論を浮かび上がらせた。何十年もの間，馬の労働は技術の変化に影響を受けなかったように思われた。鉄道が駅馬車や大型幌馬車に取って代わった時でさえ，アメリカの馬の数は，見たところ果てしなく増えていった。その動物は，農場だけでなく，その国の急速に成長していた都心部でも重要であった。しかしそれから，強力かつ効率のよいエンジンの導入と広まりによって，その傾向は急速

に逆転した。エンジンが，都市部の自動車や，田舎のトラクターに行き着くと，馬は大部分が無意味なものになっていった。そこで，問題は同様の結果が人間の労働に起こりうるかどうかである。自律した機械やスーパーコンピューターは，最終的に人間を経済から一掃する将来の技術的進歩の波を示しているのだろうか。レオンチェフにとっては，答えは Yes であった。しかしながら，彼はいくつかの重要な点を見逃していた。人間は, 幸いなことに, 馬ではないし, 経済の重要な一部のままでい続けている。

アルフレッド・マーシャルというイギリスの経済学者は，彼の基盤となる 1890 年の本『経済学原理』の中で，「人間の欲求や欲望は無数にあり，種類も非常に多様だ」と言っている。マーシャル以来ずっと，人々は無限の欲望を完全雇用に結び付けてきた。結局，労働者以外誰が，それら全ての欲求や欲望を満たすことができるだろうか。私たち人間は，徹底的に社会的な種で，人間的つながりへの欲求が，経済生活に及ぶ。遊びやスポーツイベントに参加するとき，団結して人間の表現能力を正しく認める。なじみの客が頻繁に特定のレストランを訪ねるのは，食事や飲み物が目当てであるだけでなく，そこで提供されるおもてなしが理由でもある。この場合には，人間同士の交流は，経済取引の中心であって，付随的なものではない。人間には他の人間によってのみ満たせる経済的欲求があり，そのおかげで，私たちは馬がたどった道を進むことを否定できるのだ。

## 第２講 重要語彙リスト ＊一つ一つ何度も繰り返して，覚えてください

| | | |
|---|---|---|
| 1 | debate | 議論 |
| 2 | era | 時代 |
| 3 | protest | 抗議する |
| 4 | introduction | 導入 |
| 5 | threaten to do | ～する恐れがある |
| 6 | burst | 爆発，突発 |
| 7 | concern | 心配 |
| 8 | mass | 大量 |
| 9 | replace | 取って代わる |
| 10 | spread | 広まり |
| 11 | predict | 予言する |
| 12 | innovation | 革新 |
| 13 | prosperity | 繁栄 |
| 14 | widespread | 広範囲の |
| 15 | result in | ～に終わる |
| 16 | progressively | 次第に，ますます |
| 17 | wage | 賃金 |
| 18 | steadily | 着実に |
| 19 | highlight | 強調する，目立たせる |
| 20 | comparison | 比較 |
| 21 | railroad | 鉄道 |
| 22 | seemingly | 見たところ |
| 23 | urban | 都会の |
| 24 | trend | 傾向 |
| 25 | reverse | 逆転する |
| 26 | find one’s way into | ～に行き着く |
| 27 | countryside | 田舎 |
| 28 | outcome | 結果 |
| 29 | autonomous | 自律的な |
| 30 | indicate | 示す |
| 31 | sweep | 一掃する |
| 32 | fortunately | 幸いなことに |
| 33 | countless | 無数だ |
| 34 | link A to B | A を B に結び付ける |
| 35 | fulfill | 満たす |
| 36 | carry over to | ～に引き継がれる，及ぶ |
| 37 | hospitality | もてなし |
| 38 | interaction | 交流，相互作用 |
| 39 | transaction | 取引 |
| 40 | incidental | 付随する |

## 第２講 音読用白文 ① ② ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨ ⑩

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On one side of the debate are those who believe that new technologies are likely to replace workers. In 1930, after the spread of electricity and the motor car engine, one economist predicted that such innovations would lead to an increase in material prosperity but also to widespread unemployment. At the beginning of the computer era, in 1964, a group of scientists and social theorists warned that automation results in improving the productive capacity, requiring progressively less human labor. On the other side are those who say that workers will be just fine. They point out that real wages and the number of jobs, have increased relatively steadily throughout the industrialized world even as technology has advanced like never before.

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